

**Heterogeneously catalyzed partial gas phase oxidation of propene to acrylic acid**

**Abstract**

- 5 In a process for partially oxidizing propene to acrylic acid in the gas phase under heterogeneous catalysis, a starting reaction gas mixture comprising propene and oxygen and having a specific composition is oxidized in a first reaction stage over a first fixed catalyst bed having a volume-specific activity which is constant or increases in the flow direction and the acrolein-containing product gas mixture of the first reaction
- 10 stage is subsequently oxidized in a second reaction stage over a second fixed catalyst bed having a volume-specific activity increasing in the flow direction, and the shaped catalyst bodies of both fixed catalyst beds are annular and each have a specific multimetal oxide composition.